### **REMARKS**

Initially, in the Office Action dated September 3, 2004, the Examiner objects to the Declaration as failing to identify the application by serial number, and for failing to identify the parent application. The Examiner points out that in order to claim priority from an earlier application, the first sentence of the specification must contain a specific reference to the prior application(s). The abstract is objected to because it exceeds 150 words. Fig. 1 is objected to as lacking the designation "Prior Art".

Claims 21-26, 28 and 29 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,361,202 (Doue) in view of U.S. Patent No. 5,504,888 (Iwamoto et al.). Claim 27 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Doue and Iwamoto et al. in view of U.S. Patent No. 5,627,783 (Miyauchi).

By the present response, Applicants have submitted new claims 30-33 for consideration by the Examiner and submit that these claims do not contain any prohibited new matter. Applicants have amended claims 21-25 and 27-29 to further clarify the invention. Claims 21-33 remain pending in the present application.

The Examiner objects to the Declaration because it does not identify this application by application number and filing date. This Declaration was filed concurrently with the application and was a copy of the Declaration from parent application No. 09/044,163, filed March 19, 1998. Withdrawal of this objection is respectfully requested.

<u>Declaration Objections</u>

The Examiner also objects to the Declaration as failing to identify parent application No. 09/044,163, filed March 19, 1998. The Declaration was filed with the parent application on March 19, 1998 and the box adjacent to "attached hereto" is checked. Therefore, the application serial number and the filing date are not necessary. Withdrawal of this objection is respectfully requested.

#### Specification Objections

The Examiner notes that an application in which the benefits of an earlier application must contain a specific reference to prior application(s) in the first sentence of the specification. The specification was amended by Preliminary Amendment on February 28, 2002 to include a specific reference to the parent application.

## Abstract Objections

The Examiner objects to the Abstract as exceeding 150 words. A substitute abstract is attached hereto.

#### **Drawings Objections**

Fig. 1 is objected to as lacking the designation "Prior Art". A replacement Fig. 1 is attached hereto.

#### 35 U.S.C. §103 Rejections

Claims 21-26, 28 and 29 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Doue in view of Iwamoto et al. Applicants respectfully traverse these rejections.

Doue discloses a computer display system that includes a displayed representation of the duration of the stay of an identified patient in the healthcare facility. Patient data is stored in data files in a database, wherein each data file in the database includes a plurality of data records. A user positions a cursor on the displayed representation using an input unit and signals the computer of a desired date and time. The computer, in response to the signal, determines the desired date and time from the position of the cursor and accesses a data record or records from the data file based on the desired date and time. The accessed data record or records may then be displayed.

Iwamoto et al. discloses an extended storage being temporarily used for the dedicated use by a batch process to eliminate the contention of resources between an online process and the batch process and obtain a high speed batch process while the online process is executed without affecting the online process. The online process is executed by inputting data from a file to a main storage, and the batch process updates the data on the extended storage in parallel with the online process. Since the accessing device for the online process and the batch process are different, there is no contention of resources.

Regarding claims 21-25, 28, 29, and new claims 32 and 33, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of each of these claims of, <u>inter alia</u>, bookmark information areas respectively provided at predetermined locations in said plurality of data areas, each having a pair of bookmark information

indicative of a time at which said data is loaded in a time series data piece for said constant time in each of said data areas and state transition information indicative of a state of the data piece in said each data area, said state transition information being allowed to have one of a value indicative of an online state in which the data area is permitted to be retrieved, a value indicative of a loading state in which loading of data in the data area has not yet been completed and a value indicative that the data area is not permitted to be retrieved, or deciding, in response to a request for time series data with a retrieval request time, to retrieve a time series data from said predetermined location when said retrieval request time is within a range of time indicated by a time data in said bookmark information and not to retrieve when said retrieval request time is not within said range of time indicated by said time data, or deciding, in response to a request to delete data with a delete data time, whether said delete data time of said request is within a range of time indicated by a time data in said bookmark information.

The Examiner asserts that Doue discloses bookmark information respectively provided at predetermined locations in a plurality of data areas each having a pair of bookmark information indicative of a time in which the data is loaded in a time series data piece for the constant time in each of the data areas, at col. 5, lines 1-10. However, these portions of Doue merely disclose the duration of a patient's stay is approximated by the difference between the earliest date and timestamp of the data records for the patient and either the current time or, if the patient has been discharged, the latest date and timestamp of the data records for the patient. A time

and date stamp on a record has nothing to do with a bookmark, as recited in the claims of the present application. Doue merely discloses date and time information existing in a record of a patient that can be electronically searched. This is not bookmark information. Further, this is not bookmark information areas respectively provided at predetermined locations in a plurality of data areas. Moreover, these portions of Doue do not disclose or suggest each plurality of data areas having a pair of bookmark information indicative of a time in which the data is loaded in a time series data piece for the constant time in each of the data areas, as recited in the claims of the present application. The date and timestamp of the data records for the patient are merely searched and compared in order to be found and displayed.

The Examiner admits that Doue fails to disclose or suggest state transition information indicative of a state of the data piece in each data area, the state transition information being allowed to have different values, but asserts that Iwamoto et al. discloses these limitations by the load completion flag of Iwamoto et al. at col. 5, line 63 and the access inhibit flag of Iwamoto et al. at col. 5, line 67. However, these portions of Iwamoto et al. merely disclose a load completion flag for indicating the completion of load to the extended storage, and an access inhibit flag indicating the page in the extended storage which cannot be accessed. This is not state transition information being allowed to have one of a value indicative of an online state in which the data area is permitted to be retrieved, a value indicative of a loading state in which loading of data in the data area has not yet been completed, and a value indicative that the data area is not permitted to be

retrieved, as recited in the claims of the present application. The completion of load flag in Iwamoto et al. is not related to <u>an online state</u>, as recited in the claims of the present application. Further, the access inhibit flag in Iwamoto et al. indicating that the page cannot be accessed, does not disclose or suggest <u>a loading state in which loading of data has not yet been completed</u>. These portions of Iwamoto et al. do not disclose the limitations in the claims of the present application.

Regarding claims 26, and new claims 30 and 31, Applicants submit that these claims are dependent on one of independent claims 24, 25 and 29 and, therefore, are patentable for the same reasons noted regarding these independent claims. For example, none of the cited references disclose or suggest adding, to a piece in the cumulative data storage area bookmarking information having bookmark information indicative of a time in which the data is loaded in the data piece for the predetermined constant time and state transition information indicative of a state of the time series data piece or the predetermined constant time and loading resulting data pieces in the plurality of data areas in the database, each of the plurality of data areas being loaded with data generated in time series during a certain time, the plurality of data areas being managed by the time series, or deciding, in response to a request to delete data from the plurality of consecutive data areas with a delete data time, whether the delete data time of the request is within range of time indicated by a time data in the bookmark information.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in

the combination of each of claims 21-26, 28, 29 and new claims 30-33 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

Claim 27 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Doue, Iwamoto et al. and further in view of Miyauchi. Applicants respectfully traverse this rejection.

Miyauchi discloses a semiconductor disk device that includes a flash memory having a plurality of blocks, and a CPU for converting a logical sector address into a physical-logical block number and its offset value, for searching for a block and a data memory area in the flash memory based on the physical-logical block number and offset value, and for reading the content of the data memory area when no chain data is stored in an update data chain information memory area.

Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of claim 27 of, inter alia, a database managing system that includes a processor where the processor includes means for deciding, in response to a request for time series data with a retrieval request time, to retrieve a time series data from the predetermined location when the retrieved request time is within a range of time indicated by a time data in the bookmark information and not to retrieve when the retrieval request time is not within the range of time indicated by the time data. As noted previously, neither Doue nor Iwamoto et al. disclose or suggest these limitations in the claims of the present application. Miyauchi does not

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overcome the substantial defects noted previously regarding Doue and

Iwamoto et al.

Accordingly, Applicants submit that none of the cited references, taken alone

or in any proper combination, disclose, suggest or render obvious the limitations in

the combination of claim 27 of the present application. Applicants respectfully

request that this rejection be withdrawn and that this claim be allowed.

In view of the foregoing amendments and remarks, Applicants submit that

claims 21-33 are now in condition for allowance. Early allowance of such claims is

respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37

CFR 1.136. Please charge any shortage in fees due in connection with the filing of

this paper, including extension of time fees, or credit any overpayment of fees, to the

deposit account of Mattingly, Stanger & Malur, P.C., Deposit Account No. 50-1417

(referencing attorney docket no. 500.36133CC2).

Respectfully submitted,

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Attachment: Replacement Sheet

Substitute Abstract

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# **Amendments to the Drawings**

The attached sheet of drawings includes changes to Fig. 1. This sheet includes Figs. 1 and 2. In Fig. 1, the legend "Prior Art" is added.